

Table 1 summarizes the case-control relative risks by years of sawmill exposure separated by age group. A Mantel-Haenszel summary relative risk showed a threefold increase in leukemia risk to patients with ten or more years of sawmill industry exposure, with a Mantel-Haenszel summary  $\chi^2$  for dose-response statistically significant at  $P=.017$ . The table excludes patients under 35 for whom very few high exposures were noted and excludes repeat discharges for the same diagnosis. In addition, patients with other types of lumber and wood products exposure are not included in the no-exposure group since these industries are somewhat related to the sawmill industry in terms of work exposures and thus might dilute the risks.

As a check on the adequacy of the control group, the overall study showed statistically significant increased relative risks to lumber and wood products workers for a multitude of musculoskeletal diseases, injuries, hernias, several gastrointestinal conditions and mononeuritis. Overall, about twice as many significant associations as would be expected by chance were found. A National Institute for Occupational Safety and Health study of Social Security disability awards<sup>6</sup> mirrors very closely the musculoskeletal and injury findings, hernias have also been noted by Goldberg<sup>7</sup> and neuritis as an occupational hazard is described by Mayers.<sup>8</sup>

The point of interest is that these data seem to corroborate the IARC findings, using data from a surveillance study in another setting. The increased risk for patients with a sawmill work history, and not necessarily for those with millwork and logging exposures, could be, in part, an artifact of sample size since there were more people with sawmill exposures, but could also be due to specific exposures such as the chemical hazards suggested earlier. For example, industrial hygiene surveys of plants in the study area indicate the use of chlorophenols and even wood dust itself may be suspect.

It should also be kept in mind that the methodology of a surveillance study is less rigorous, with the emphasis on large numbers of patients, many diseases and several exposures, at the expense of the more detailed exposure and disease data that can be collected in smaller definitive studies of one disease and one exposure.

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## High Rock, High Tech and Karl Marx

TO THE EDITOR: Another acronym, VDT, is in the news. VDT is not another sexually transmitted disease, nor does it have to do with alcohol withdrawal. As most physicians know, VDT stands for video display terminal.

VDT means excitement, high technology and, most of all, money. John Chancellor, on the evening news, tells the Horatio Alger story of the half a dozen youthful entrepreneurs who have rapidly amassed great fortunes in the computer industry.

There is this 30-year-old genius named Wozniak who used 12 million of his easily earned Apple II computer dollars to stage a "Western Woodstock." In the amphitheater there was a continuous flow of rock music, in an adjacent tent he had a glittering array of sophisticated computerized technology. Video display terminals were there for everyone to play with—high rock wedded to high tech. In the vernacular of the trade we are "on the fast track" to computer culture.

This would seem to epitomize the new and wonderful era on whose brink we now stand. The stodgy old work ethic can be discarded. Thanks to the computer, we can enjoy more and work less. Let the machines do our thinking for us. Grade school kids no longer need multiplication tables or long division. At ready are their handy pocket calculators. Doctors can call on their computers for a quick diagnosis and the proper treatment protocol. No more head-scratching. No more soul-searching. Should it be that a mistake was made and the patient dies, let them sue the computer. High rock and high tech and a VDT in every office and every kitchen—the dream of tomorrow.

But there are dark clouds on the horizon. An

article in a Washington state newspaper carries the headline "VDT Horror Stories are Scaring Workers" (*Spokesman-Review* [Spokane, Wash], Aug 23, 1982). The story goes on to say that "Of six pregnant women who worked at video display terminals (VDTs) on their jobs at Vancouver's Surrey Memorial Hospital, only one gave birth to a healthy baby." Two women had miscarriages, one infant was a month premature, one baby had a deformed foot and one had a "serious lung condition." This can, of course, be considered purely coincidental. Yet everyone knows that the cathode tubes in VDT's do emit several forms of radiation. We have become ultraconservative in the use of x-rays, especially during pregnancy. Should we not now have VDT operators wear lead aprons?

Even more frightening is a story published in a recent issue of the *Smithsonian* entitled "When Criminals Turn to Computers Is Anything Safe?" (*Smithsonian*, Aug 1982, p 117). In this fascinating article the author, Gina Kalata, tells how easy it is for anyone with a minimum of computer know-how to do a little "data diddling," or by using a technique called "super-zapping" to be able to extract all manner of information from a computer bank. She quotes Ken Thompson of the Bell Laboratories of New Jersey: "Computers are marvelous. You can talk a computer into spilling its guts to you. You can steal forever and the person you steal from won't ever know that something is missing." A reporter, dressed as a repairman, simply walked into the computer room of a big corporation and by plugging into a computer he could obtain all the programmed information he desired. All he needed to do, he said, was to ask the computer for the entire list of passwords, and instantly the black box gave him a complete print-out.

Could this mean the end of the protection of the confidentiality of our patients' records? What is to prevent a "super-zapper" from punching keys to find out who has what—an abortion, a divorce, a bout with VD—enabling him to rattle a skeleton in a family closet?

This unhappy side of the computer picture gives pause to all of us in the medical profession. Obviously the matter of cathode radiation cannot be ignored with 500,000 home computers now in place, and many more in business and industry. But of greater concern is the potential for meddling with medical information stored in computer banks.

Could it be that the wizardry of computerized "high tech" as it insinuates itself into our modern society is, as Karl Marx put it years before the silicon chip made its appearance, "Like the sorcerer who is no longer able to control the powers of the nether world whom he called up by his spell"?<sup>1</sup>

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## A Distinction in Terminology

TO THE EDITOR: In reading the August 1982 issue I thoroughly enjoyed the Information article entitled "The Bedside Sherlock Holmes,"<sup>1</sup> which I found directly relevant to my area of specialty practice. However, the article does contain a common misconception, which I and my fellow practitioners would like to see editorially corrected forevermore.

The opening sentence of the article refers to an "emergency room physician." I might note that this is a designation whose time has come and gone. Those of us who practice the newly recognized specialty of emergency medicine refer to ourselves, with pride and justification, as "emergency physicians"; it is our belief that this more accurately reflects the tremendous changes that have taken place in our field over the past several years. Although this terminology distinction may appear insignificant, I believe it captures the expectation of both our patients and our medical colleagues.

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